# Article information:

Energies | Free Full-Text | A Coordinated DC Power Support Strategy for Multi-Infeed HVDC Systems
<https://www.mdpi.com/1996-1073/11/7/1637>

# Article summary:

1. A coordinated DC power support strategy for multi-infeed HVDC systems is proposed to overcome the difficulty in maintaining DC voltage values at converter stations during the process of DC power support.

2. Synchronous condensers are employed to provide dynamic reactive power compensation in sustaining DC voltage values at converter stations.

3. An optimal load shedding model is used to ensure the frequency security of receiving-end systems.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article “A Coordinated DC Power Support Strategy for Multi-Infeed HVDC Systems” provides a comprehensive overview of the proposed strategy and its potential benefits. The authors present a detailed description of the strategy, including models for optimal leading phase operation and adjusting excitation voltage reference value of synchronous condensers, as well as an optimal load shedding model to ensure frequency security of receiving-end systems. The article also includes case study results from a provincial power system in China that demonstrate the effectiveness and performance of the proposed strategy.

The article appears to be reliable and trustworthy overall, as it provides a thorough explanation of the proposed strategy and its components, as well as evidence from case studies that demonstrate its effectiveness. However, there are some potential biases that should be noted. For example, while the authors discuss potential risks associated with implementing their proposed strategy, they do not explore any counterarguments or alternative strategies that could be used instead. Additionally, while they provide evidence from case studies demonstrating the effectiveness of their proposed strategy, they do not provide any evidence or discussion regarding possible drawbacks or limitations associated with it. Furthermore, while they discuss potential risks associated with implementing their proposed strategy, they do not provide any discussion regarding how these risks can be mitigated or avoided altogether.

In conclusion, this article provides a comprehensive overview of a coordinated DC power support strategy for multi-infeed HVDC systems and presents evidence from case studies demonstrating its effectiveness. However, there are some potential biases that should be noted such as lack of exploration into counterarguments or alternative strategies and lack of discussion regarding possible drawbacks or limitations associated with it. Additionally, there is no discussion regarding how potential risks associated with implementing this strategy can be mitigated or avoided altogether.

# Topics for further research:

* Alternatives to DC power support strategy
* Mitigation of risks associated with DC power support strategy
* Limitations of DC power support strategy
* Advantages of DC power support strategy
* Case studies of DC power support strategy
* Optimization of DC power support strategy

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